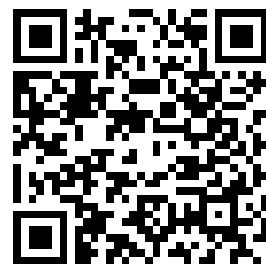
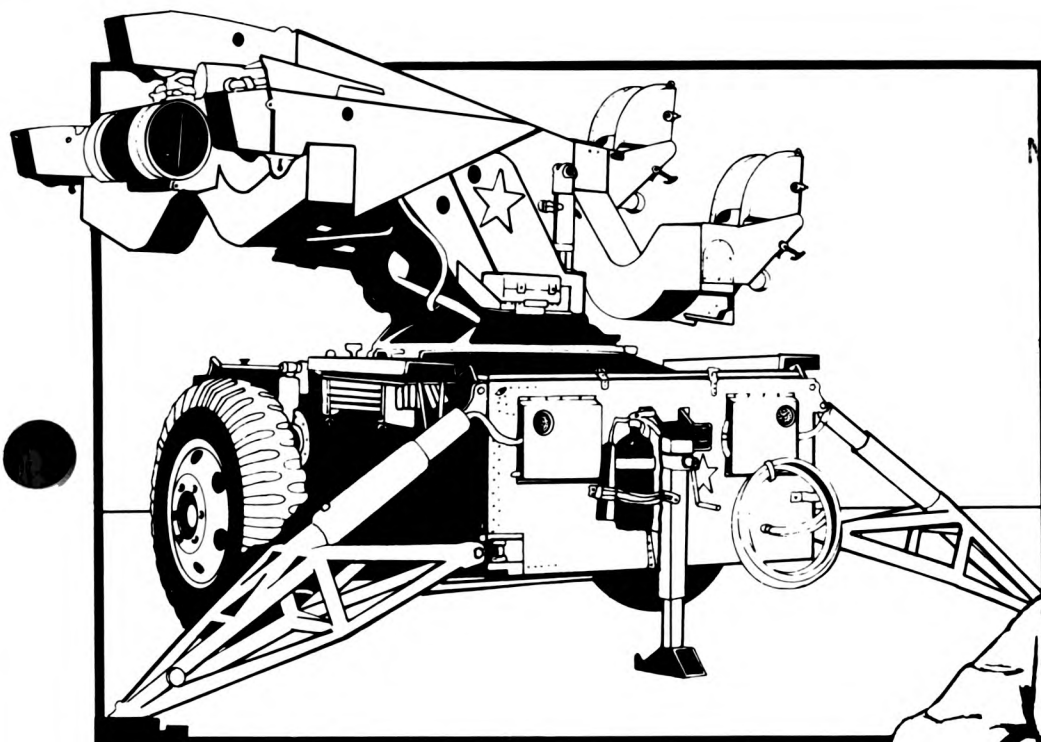

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IMPROVED HAWK LAUNCHER/MECHANICAL SYSTEMS REPAIRER



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TRAINER'S GUIDE

HEADQUARTERS, DEPARTMENT OF THE ARMY

**HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 30 November 1981**

**TRAINER'S GUIDE
MOS 24L
IMPROVED HAWK LAUNCHER/MECHANICAL SYSTEMS REPAIRER**

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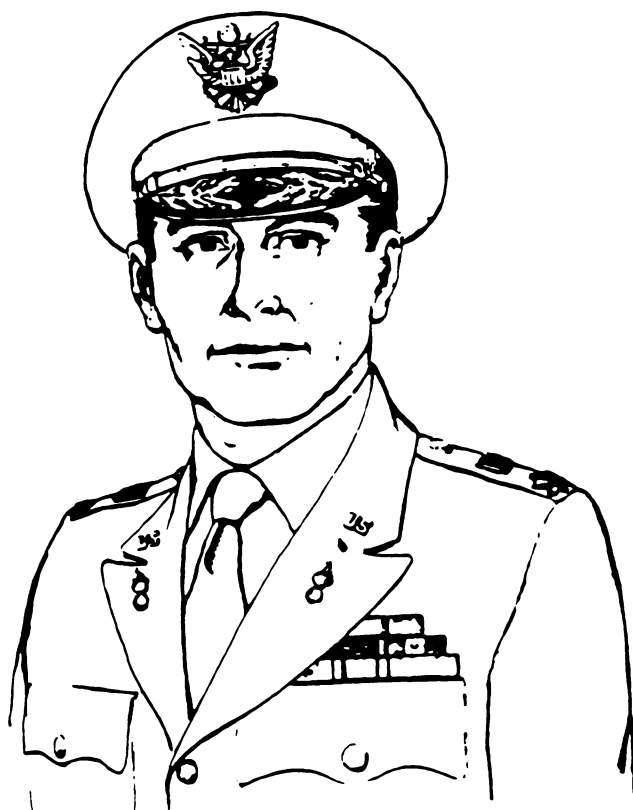
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***This publication supersedes FM 9-24L/CM, 2 Oct 1978, including all changes.**

Users of this publication are encouraged to recommend changes and submit comments for its improvement. Comments should be keyed to the specific page, paragraph, and line in the text in which the change is recommended. Provide reasons for each comment to insure understanding and complete evaluation. Comments should be prepared using DA Form 2028 (Recommended Changes to Publication) and forwarded to:

Commandant
U.S. Army Missile and Munitions Center and School
ATTN: ATSK-TDA
Redstone Arsenal, AL 35897

The words "he," "him," "his," and "men," when used in this publication, represent both the masculine and feminine genders unless specifically stated.



ATTENTION COMMANDER!

DISTRIBUTE THIS GUIDE TO ALL OFFICERS AND SENIOR NCOs WHO HAVE ENLISTED PERSONNEL OF MOS 24L UNDER THEIR COMMAND OR SUPERVISION.

The Trainer's Guide is designed to provide the commander, training manager, and the trainer some of the information required to plan, conduct and evaluate training for a particular MOS. The Trainer's Guide lists all tasks found in the Soldier's Manual for the MOS. It references primary training materials required for each task and indicates the locations for "Qualification" and "Additional" training. It also contains appendixes listing consolidated training references, devices and training ammunition required to conduct and evaluate training.

This Trainer's Guide was prepared by the U.S. Army Missile and Munitions Center and School.

Harry L. Foradori
 Harry L. Foradori
 Colonel, Ordnance Corps
 Commandant

LORY ARMORY



RESERVE COMPONENT COMMANDERS ATTENTION

RESERVE COMPONENTS

The information on this page is for you, the Reserve Component Trainer. Although this manual lists the critical tasks to be performed by the Active Army soldier in this MOS on equipment available in the Active Component inventory, most tasks in this manual are applicable to Reserve Component soldiers without changes. However, some tasks may require modification because of differences of equipment, facilities, and training time available. Because of these differences, the Reserve Component Trainer will need to be innovative and seek ways to enable the soldiers to accomplish these critical tasks.

Chapter 1

INTRODUCTION

PURPOSE

Your Trainer's Guide gives you, the unit commander, the training manager, and the trainer, some of the information you need to help plan, conduct, and evaluate unit training. Unit training is the most important job of military leaders.

The training manager and the trainer must do their jobs right. When soldiers are trained, they do their jobs right and in turn complete the unit's mission. Your Trainer's Guide can help you tailor training to the specific needs of the soldiers and to evaluate that training. It lists the tasks that MOS24L soldiers must know, where these tasks are taught, and the basic information needed to set up individual training. Use this Trainer's Guide along with the 24L Soldier's Manual, the Job Book (TC 9-24L1/2 (JB), and the two Soldier's Manuals of Common Tasks (FM 21-2 and FM 21-3).

COMMANDER'S RESPONSIBILITY

The commander is responsible for the unit mission. Soldiers can't do their job if they haven't learned how. For the unit to succeed, you must insure each soldier is satisfactorily trained. This Trainer's Guide and the Trainer's Guide for FM 21-2 and FM 21-3 give you, your training manager, and your trainers some of the information needed to plan, conduct, and evaluate training for MOS 24L.

TRAINING MANAGER'S RESPONSIBILITY

You are responsible for planning, evaluating, monitoring, and providing the resources for training. Soldiers holding MOS 24L must learn and become proficient in several tasks. The tasks in Soldier's Manual FM 9-24L are listed in chapters 2 and 3 and cover some of the following areas:

- Preparing DA Forms and Records
- Operating Test Equipment
- Repairing HF Console
- Repairing Test Equipment
- Repairing the IPAR and IROR
- Intra-system Maintenance
- Transporting Major End Items
- Supervision and Maintenance Management

Skill level 1 and 2 tasks from FM 9-24L, FM 21-1, and FM 21-3 are listed in TC 9-24L1/2 (JB). Each Soldier's Manual tells you and the soldier:

- What TASKS the soldier is expected to perform.
- Under what CONDITION each task is done.
- The STANDARD the soldier must reach to do each task.
- The PERFORMANCE MEASURES needed to complete each task.
- What REFERENCES are needed to help do each task.

You must make a training plan trainers can use; provide for the resources (building, room, area, equipment, supplies, funds, training aids and devices, and so forth); monitor the training to make sure it meets the needs of the soldiers; and evaluate the training when it is completed.

TRAINER'S RESPONSIBILITY

You must prepare, conduct, and critique training. Use your training plan to find out what must be taught, where, when, and to whom. When planning training, don't rely solely on your own knowledge of the subject. Review reference materials to insure you use the latest information. Use TC 21-5-7, Training Management in Battalions, and FM 21-6, How to Prepare and Conduct Military Training, for basic guidance.

INDIVIDUAL TRAINING PROGRAM

For each soldier to be trained, you need an individual training program to plan, train, and evaluate training. Use the task lists in chapters 2 and 3 of this Trainer's Guide to make your individual training plans. Each task is listed (task number, task title, primary references for the task, the skill level of training, and where the training for the task is done). A letter in a column shows where the training is done, formal training in a school, or unit training. The letter "Q" shows where QUALIFICATION training is done, the letter "A" shows where ADDITIONAL training is done. The task list shows those tasks taught in Advanced Individual Training and the tasks taught in the unit through supervised on-the-job training, scheduled training, and self study.

At appendix A of the Trainer's Guide is a consolidated list of references for the tasks. Appendix B is the job description for MOS24L.

TRAIN AND RETRAIN

Skills not practiced are soon lost. Athletics is a good example of why training and retraining is needed. Athletes must practice to retain their skills. The soldier is no different. For athletes, the coach sees to it that all team members are trained in their tasks. You, like the coach, must see to it that your team is trained to do its job. As a trainer you must verify, after a proper amount of time, that soldiers can do their job. Feedback from supervisors using Job Books will help. Design your training program to correct areas that have been determined through performance evaluation as needing improvement. You can get more feedback from the SQT unit profile summary sheet. It shows the number and percentage of soldiers failing each task. Continued evaluation will give you information for the individual Training Program.

ENLISTED PERSONNEL MANAGEMENT SYSTEM (EPMS)

For the first time, enlisted personnel have a complete career development program: The Enlisted Personnel Management System. It affects the training, evaluation, classification, and promotion of every enlisted soldier in the Army. The system is designed to provide career incentives, progression, and professionalism, while providing qualified people to carry out the Army's mission.

PAY GRADE		SKILL LEVEL		SQT TAKEN
E8 - E9	↔	5	↔	NONE
E7	↔	4	↔	SQT 4
E6	↔	3	↔	SQT 3
E5	↔	2	↔	SQT 2
E1 - E4	↔	1	↔	SQT 1

CAREER PROGRESSION

There are five skill levels in the Air Defense Missile Maintenance Field, and there are soldier's manuals for all skill levels. MOS24L merges into MOS24V, Improved Hawk Maintenance Chief. The soldier can continue in the 24V track to skill level 5. (See progression chart.)

SKILL QUALIFICATION TEST (SQT)

The skill level 1 soldier is evaluated by the SQT. Skill level 2 and 3 soldiers are evaluated by the SQT, and by a senior enlisted evaluation report (SEER). Soldiers are then classified and considered for promotion. The skill qualification test is a yearly test designed to test the soldier's ability to perform the tasks at the skill level held and the lower skill levels in the MOS.

SQT PARTS

The SQT is based on the tasks in FM 9-24L, FM 21-2 and FM 21-3, and may consist of three parts:

- **SKILL COMPONENT.** This part tests the soldiers knowledge of those tasks that cannot easily be tested by the hands-on method.

- **HANDS-ON COMPONENT.** This part tests the soldier's ability to perform selected tasks on the TOE or TDA equipment.

NOTE: ALTERNATE HANDS—ON COMPONENT. This part is a written test to be used when it is not practical to administer the hands-on component.

- **JOB SITE COMPONENT.** This part consists of tasks that are not suited for skill qualification testing for either the skill or hands-on components.

They are long or complex tasks. You or your designated representative certify the soldier has done the tasks satisfactorily on the job.

SQT NOTICE

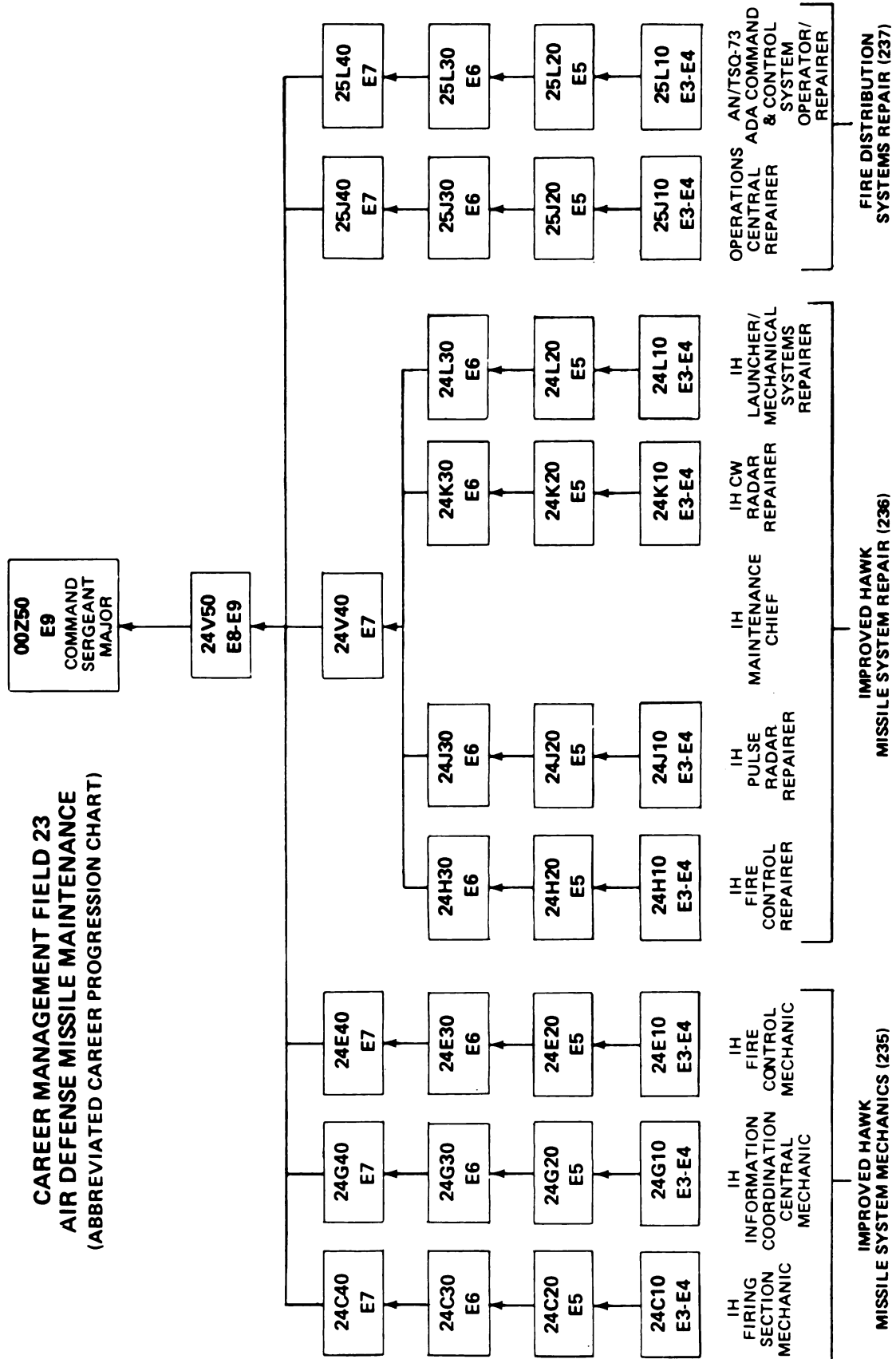
Soldiers receive their SQT notice and Job Site Component Booklet 90 days before the SQT. Each notice lists the tasks in the SQT. The first SQT a soldier takes (SQT 1, SQT 2 and so on) depends on the pay grade held. Soldiers are tested once a year in the primary MOS. To successfully prepare for the SQT, your soldiers need FM 9-24L, FM 21-2, and FM 21-3.

SQT SCORE

The SQT score is used to verify the soldier's present skill level or to make the soldier eligible to be considered for promotion.

- If a soldier makes a score of 60 percent or more it is proof of proficiency in the MOS at the present skill level. The soldier verifies the skill level held.
- If a soldier doesn't pass the test, the soldier is not qualified at that skill level. The test must be taken again. Another failure, and the soldier becomes subject to reclassification.

**CAREER MANAGEMENT FIELD 23
AIR DEFENSE MISSILE MAINTENANCE
(ABBREVIATED CAREER PROGRESSION CHART)**



SQT FEEDBACK

About 30 days after the SQT, you get an SQT unit profile summary sheet that shows the number and the percentage of soldiers in your unit who pass or fail the test. Each soldier also receives a notice of test results with a list of tasks failed, if any. You get a copy of each soldier's test results to evaluate the strengths and weaknesses of individual skills.

ARMY TRAINING AND EVALUATION PROGRAM (ARTEP)

The ARTEP lists the collective tasks that must be performed by the unit under given conditions and to given standards. The association between the individual tasks of the Soldier's Manuals and the collective tasks of the ARTEP is a critical relationship. The collective tasks of the ARTEP are composed of the individual tasks identified in the Soldier's Manuals. The ability of your unit to perform collective tasks is based on each soldier's mastery of individual tasks. ARTEP 9-59 Hawk/Nike GS Missile Maintenance Companies, is one of the best tools you have for training and evaluating your unit. As a training tool, use it to train soldiers to work together to do mission tasks and use it to evaluate their training. The ARTEP gives you:

- a list of selected tasks in your units TOE mission,
- conditions under which the tasks must be performed,
- standards that define the acceptable performance of the tasks, and
- a system for using performance-oriented training to help in developing an effective training program.

FEEDBACK

The SQT gives you feedback on individuals and the ARTEP gives you feedback on your unit. This feedback must be supplemented by your evaluation of your unit's level of performance. You must be able to track your soldier's and your unit's progress through the necessary training that leads to mission success. Unannounced testing is the best way to determine the level of proficiency of your unit. Additional feedback on the state of training for each soldier includes the use of administrative data and files to determine turn over, institutional training background, and experience levels. For skill level 1 and 2 soldiers, the Job Book is a valuable source that identifies training deficiencies.

Once you have identified areas that need additional emphasis, use the Soldier's Manual and the ARTEP to structure your training. You must train your soldiers to do the tasks in their present skill level and then train them to do the tasks in the next higher skill level.

Evaluate each individual soldier's ability to do the tasks in Soldier's Manuals. Evaluate the unit's ability to do its ARTEP missions. Feedback from the SQT and the ARTEP can provide a solid foundation on which you can build a successful training program.

Second-level training prepares the E5 skill level 2 soldier for duty at grade E6, skill level 3.

The Primary Leadership Course (PLC) is given at the installation level. It is for the soldiers you select as having the potential to become NCOs. The PLC develops those training and leadership skills needed by an NCO. You should insure that your best soldiers are given the opportunity to attend this course. It will enhance their advancement potential and provide better-trained leaders for your unit.

An Advanced NCO Course (ANCOC) for E6s, also given at USAMMCS, trains soldiers for grade E7. Students for this course are selected by Department of the Army.

The Senior NCO Courses (SNCOC) trains selected E8s and E9s. Senior Courses include the Sergeants Major Academy (E8s only), an operations and intelligence extension training program, and a unit administration course for first sergeants.

NONCOMMISSIONED OFFICER EDUCATION SYSTEM (NCOES)

Training under EPMS prepares soldiers for the skill levels they hold and the next higher skill level.

The training consists of Advanced Individual Training for skill level 1 and on-the-job experience or formal training for skill levels 2 through 5.

For MOS 24L formal school training is first-level training. It prepares the E4 soldier, skill level 1, for the duties of the E5, skill level 2. There is no formal training for skill level 2 and 3 tasks. All these tasks are trained in the unit under supervised on-the-job training, self study, and on-the-job experience. Figure 1, Training, shows some of the career training the 24L soldier can get.

MOSs	SKILL LEVEL	GRADE	TRAINING	SELECTION	EVAL- UATION
24H 24J 24K 24L	1	E1-E4	Advanced Individual Training	Volunteer & Army Acceptance	SQT 1
	2	E5	*Primary Leadership Training	Supervisor or Commander	SQT 2 SEER
	3	E6	*Advanced NCOES	Department of the Army	SQT 3 SEER
24V Improved HAWK Maintenance Chief	4	E7	Improved HAWK Maintenance Chief	Department of the Army	SQT 4 SEER
	5	E8-E9	*Sergeants Major Academy	Department of the Army	SEER
*Noncommissioned Officer Education System - - not all soldiers at these skill levels get this training.					

Figure 1. Training

ADDITIONAL TRAINING

Additional training upgrades the effectiveness of your personnel, and thus, your unit. You can use service school training, installation school training, and unit training for any training needed to qualify soldiers in their skill level and prepare them for duty at the next skill level.

Prime considerations for training are time, training areas, and available assets. Training away from the unit has much appeal, but if time, facilities, or funds limit or prohibit use of major training areas, more local training should be used. Imaginative trainers and maximum use of available training aids and devices can make the most of available assets. There are many valuable tools to help improve the unit's performance. Integration of training with the individual tasks in the Soldier's Manual and with the collective tasks in the ARTEP is a good start for a comprehensive training plan.

TRAINING REFERENCES

The reference listed after each task in the Trainer's Guide are the same as those in the Soldier's Manual, FM 9-24L. Appendix A contains the following type references:

- DA publications are listed in the DA Pam 310 series publications. Get them through your publication channels.
- Graphic Training Aids (GTA) are listed in DA Pam 108-1, Index of Army Motion Pictures and Related Audio-Visual aids. Get them from your Training and Audio Visual Support Centers.
- Training Extension Courses (TEC) are listed in ETM Status List published by U.S. Army Training Support Center. Ft. Eustis, VA. 23604. Your unit is authorized certain TEC lessons. TC 21-5-3, TEC Management Instruction, explains how TEC equipment is used.
- Army Correspondence Courses (ACCP) are listed in DA Pam 351-20. Army Correspondence Course Program Catalogs.
- Miscellaneous references. The source is given.

TRAINING AIDS

Good training aids are a valuable asset to a training program because they add validity and realism to the instruction and allow the trainers to get the point across with more impact. If used properly, training aids simplify preparation of instruction. See appendix A of FM 21-6, How to Prepare and Conduct Military Training, for the list of training and audio-visual support centers.

Chapter 2

SHARED TASKS

SKILL LEVELS 1, 2, AND 3

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING								
				INSTITUTION							UNIT	
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA		
				SELF STUDY	SOJT	SCD TNG						
SKILL LEVEL 1												
FIRST AID												
081-831 -1010	Give First Aid for Snakebite	FM 21-11	1							Q	A	A
BATTLEFIELD SURVIVAL												
551-721 -1020	Utilize Proper Defense Procedures When Ambushed or Attacked	FM 21-305 TM 55-30	1							Q	A	A
551-721 -1021	Take Passive Defense Measures Against Air Attacks	FM 21-305 FM 55-30	1							Q	A	A
TRANSPORTATION												
551-721 -1016	Drive Vehicle in Motor March or Convoy	FM 21-305 FM 55-30	1							Q	A	A
551-721 -1030	Fill Out SF 91 (Operator's Report of Motor Vehicle Accident)	FM 21-305	1							Q	A	A
551-721 -1031	Fill Out DD Form 518 (Accident Identification Card)	FM 21-305	1							Q	A	A
WEAPON PROFICIENCY												
071-311 -2006	Use Limited Visibility Firing Techniques with the M16A1 Rifle	None	1	Q						A	A	A

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING								
				BT	AIT	PTC	PLC	ANCOG	SNCOG	SGMA	SOJT	SELF STUDY
SKILL LEVEL 2												
LAND NAVIGATION												
071-329 -1004	Determine the Elevation of a Point on the Ground, Using a Map	FM 21-26 FM 21-26-1 TEC Lesson 930-071-0016-F	2	Q						A	A	A
071-329 -1010	Determine Azimuth, Using a Coordinate Scale and Protractor	FM 21-26 FM 21-26-1 TEC Lesson 930-071-0014-F GTA 5-2-10	2							Q	A	A
071-329 -1015	Locate an Unknown Point on a Map or on the Ground by Resection	FM 21-26 FM 21-26-1 TEC Lesson 930-071-0018-F	2							Q	A	A

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING									
				BT	AIT	PTC	PLC	ANCOC	SNCOC	SGMA	SOJT	SELF STUDY	UNIT
SKILL LEVEL 3													
LEADERSHIP													
121-030 -3501	Prepare the Rater's/Indorser's/ Reviewer's Sections of a Senior Enlisted Evaluation Report	AR 623-205	3					A			Q	A	
093-420 -3113	Submit Recommendations for Favorable Personnel Actions	AR 600-200 AR 672-5-1	3					A			A	Q	
093-420 -3121	Recommend Unfavorable Personnel Actions	AR 600-200 AR 601-280 FM 22-100 FM 22-101 MCM, 1969 (Rev. Ed.)	3								A	Q	
VEHICLES AND EQUIPMENT													
093-408 -3001	Prepare Vehicle Loading Plan	FM 9-59 FM 29-23 FM 55-65 TM 55-603	3								A	Q	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING									
				INSTITUTION						UNIT			
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SQJT	SELF STUDY	SCD TNG
SKILL LEVEL 3													
093-420 -3119	Direct Performance of Motor Stables	DA Pam 750-1 TM 38-750	3								A	Q	
SUPPLY													
093-420 -3120	Maintain Property Accountability	AR 710-2 FM 7-59	3								A	Q	

Chapter 3

DUTY POSITION TASKS

SKILL LEVELS 1, 2, AND 3

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING								
				INSTITUTION						UNIT		
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT	SELF STUDY
SKILL LEVEL 1												
REPAIR IMPROVED HAWK EQUIPMENT IN A NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) ENVIRONMENT												
093-420 -1021	Repair Improved HAWK Equipment in an NBC Environment	FM 21-40 FM 21-48 TM 3-220 TM 10-277	1		Q							A
SHOP SAFETY PROCEDURES												
081-831 -0006	Rescue an Electrical Shock Victim	FM 21-11 TEC Lessons: 911-441-0024-F 911-441-0026-F 911-441-0029-F	1		Q							A

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING								
				INSTITUTION						UNIT		
				BT	AIT	PTC	PLC	ANCOC	SNCO	SGMA	SOJT	SELF STUDY
SKILL LEVEL 1												
DA FORMS AND RECORDS												
093-420 -1101	Prepare DA Form 2402	TM 38-750	1		Q						A	
093-420 -1102	Prepare DA Form 2407 and DA Form 2407-1	TM 38-750	1		Q						A	
093-420 -1104	Prepare DA Form 2404	TM 38-750	1		Q						A	
093-420 -1107	Prepare DA Form 2765-1	AR 710-2	1		Q						A	
093-420 -1111	Prepare DA Form 2416	TM 38-750 TB 43-180 TB 43-180-1	1		Q						A	
093-420 -1112	Prepare DD Form 314	TM 38-750	1		Q						A	
093-420 -1113	Prepare DA Form 2408-5	TM 38-750	1		Q						A	
093-420 -1114	Prepare DA Form 2405	TM 38-750	1		Q						A	
PUBLICATIONS												
121-004 -1415	Post Regulations and Directives	DA Pam 310-13 TEC Lessons: 500-121-8125-F 500-121-8126-F	1		Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION							UNIT
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	
SKILL LEVEL 1											
TEST EQUIPMENT, IMPROVED HAWK MISSILE SYSTEM											
093-420 -1124	Operate the AN/USM 281C Oscilloscope	TM 11-6625-2658-14 TEC 1-102-906-1011-A ACCP Subcourse MM 0925	1		Q						A
093-420 -1126	Operate the Electrical Cable Test Set AN/GSM-45	TM 9-4935-262-14 TEC Lessons: 121-093-6913-A 121-093-6914-A 121-093-6915-A	1		Q						A

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING								
				INSTITUTION							UNIT	
				BT	AIT	PTC	PLC	ANCO	SNCOC	SGMA		SOJT
SKILL LEVEL 1												
093-420 -1140	Operate the Calibrator Standard	TM 9-4935-1548-14	1		Q						A	
093-420 -1141	Operate and Maintain the TS-505 Electronic Multimeter	TM 11-5511 TM 11-6625-239-12	1		Q						A	
093-420 -1142	Operate the AN/PSM-6 Multimeter	TM 11-6625-475-10	1		Q							
093-420 -1143	Opceate and Maintain the TV-7/U Electron Tube Test Set	TM 11-6625-274-12 TEC Lesson: 102-906-1081-A	1								Q	
093-420 -1144	Operate and Maintain the ZM-24A/U Ohmmeter	TM 11-2050	1								Q	
093-420 -1145	Operate the Electronic Voltmeter (10105385)	TM 9-4935-501-14	1								Q	
093-420 -1146	Operate the 8125A John Fluke Digital Multimeter	TM 9-4935-542-12	1		Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION						UNIT	
				BT	AIT	PTC	PLC	ANCOC	SNOC	SGMA	SOJT
SKILL LEVEL 1											
PREVENTIVE MAINTENANCE ON TEST EQUIPMENT											
093-420 -1156	Perform Scheduled Maintenance on the AN/USM-281C Oscilloscope	TM 11-6625-2658-14 TM 38-750	1	Q						A	
093-420 -1160	Perform Scheduled Maintenance on the TS-505 Electronic Multimeter	TM 11-6625-239-12 TM 11-5511 TM 38-750	1	Q						A	
093-420 -1163	Perform Preventive Maintenance on the AN/PSM-6 Multimeter	TM 11-6625-475-10 TM 38-750	1	Q						A	
HIGH FREQUENCY CONSOLE SELF-TEST											
093-420 -1180	Perform the High Frequency Console (HFC) Self-Test	TM 9-4935-1540-14-1 TM 38-750	1	Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION						UNIT	
				BT	AIT	PTC	PLC	ANCOG	SNCOG	SGMA	SOJT
SKILL LEVEL 1											
PERFORMING IMPROVED HAWK (IH) LAUNCHER MAINTENANCE											
093-424 -1020	Perform Umbilical Leakage Check	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-2 TM 38-750	1	Q						A	
093-424 -1021	Perform Monthly Maintenance on Improved Launcher (ILCHR)	TM 9-243 TM 9-1440-531-12-1	1	Q						A	
093-424 -1022	Replace Pump Assembly	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1	Q						A	
093-424 -1023	Replace Base Distribution Box	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1	Q						A	
093-424 -1024	Replace Blower Assembly	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1	Q						A	
093-424 -1025	Replace Alinement Telescope and Fire Cutout Assembly	TM 9-243 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1	Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING									
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	UNIT		
SKILL LEVEL 1													
093-424 -1026	Replace Azimuth Distribution Box	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1	Q							A	SELF STUDY	SCD TNG
093-424 -1027	Replace Electronic Equipment Rack	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1	Q							A		
093-424 -1028	Replace Main Hydraulic System Filter	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1	Q							A		
093-424 -1029	Repair Energizing and Power Circuits	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-12-2 TM 38-750	1	Q							A		
093-424 -1030	Repair Synchro Circuits	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-12-2 TM 38-750	1	Q							A		
093-424 -1031	Repair Positioning Circuits	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-12-2 TM 38-750	1	Q							A		

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION						UNIT	
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT
SKILL LEVEL 1											
093-424 -1032	Repair Shoot-Around Circuits	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-12-2 TM 38-750	I	Q						A	
093-424 -1033	Repair Firing and Control Circuits	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-12-2 TM 38-750	I	Q						A	
093-424 -1034	Replace Main Hydraulic System Check Valve	TM 9-243 TM 9-1440-531-12-1 TM 38-750	I	Q						A	
093-424 -1036	Replace Pressure Valve	TM 9-243 TM 9-1440-531-12-1 TM 38-750	I	Q						A	
093-424 -1037	Replace Pressure Regulator Valve	TM 9-243 TM 9-1440-531-12-1 TM 38-750	I	Q						A	
093-424 -1038	Replace Main Hydraulic System Relief Valve	TM 9-243 TM 9-1440-531-12-1 TM 38-750	I	Q						A	
093-424 -1039	Replace Fluid Pressure Filter and/or Regulator Valve	TM 9-243 TM 9-1440-531-12-1 TM 38-750	I	Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING									
				INSTITUTION							UNIT		
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT	SELF STUDY	SCD TNG
SKILL LEVEL 1													
093-424 -1040	Replace Alinement Synchro Control Transformer	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1	Q								A	
093-424 -1041	Replace Manual Azimuth Movement Valve	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1									A	Q
093-424 -1042	Replace Forward Outrigger Swivel Fitting	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1									A	Q
093-424 -1043	Replace Leveling Cylinder	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1									A	Q
093-424 -1044	Replace Accumulator Air Filler Valve	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1									A	Q
093-424 -1045	Replace Leveling Cylinder Valve	TM 9-243 TM 9-1425-525-12-1 TM 9-1440-531-12-1 TM 38-750	1									A	Q
093-424 -1046	Replace Hydraulic Oil Cooler	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1									A	Q
093-424 -1047	Replace Hatch Raising Cylinder	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1									A	Q
093-424 -1048	Repair Boom Shock Absorber	TM 9-243 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1									A	Q

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING										
				INSTITUTION							UNIT			
				AIT	PTC	PLC	ANCO	SNCO	SGMA					
SKILL LEVEL 1				BT										
093-424 -1049	Replace Temperature Control Unit	TM 9-243	1									A	Q	
		TM 9-1440-531-12-1												
		TM 38-750												
093-424 -1050	Replace Hand Pump Assembly	TM 9-243	1									A	Q	
		TM 9-1440-531-12-1												
		TM 38-750												
093-424 -1051	Replace Base Hydraulic Panel Manifold	TM 9-243	1									A	Q	
		TM 9-1440-531-12-1												
		TM 38-750												
093-424 -1052	Replace Restrictor Assembly	TM 9-243	1	Q								A		
		TM 9-1440-531-12-1												
		TM 38-750												
093-424 -1053	Replace Boom Snubber	TM 9-243	1									A	Q	
		TM 9-1440-531-12-1												
		TM 38-750												
093-424 -1054	Replace Electrical Power Unit Power Supply	TM 9-243	1									A	Q	
		TM 9-1440-531-12-1												
		TM 38-750												
093-424 -1055	Replace Drawbar Assembly	TM 9-243	1									A	Q	
		TM 9-1440-531-12-1												
		TM 38-750												
093-424 -1056	Replace Main Reservoir Thermostatic Switch Assembly	TM 9-243	1									A	Q	
		TM 9-1440-531-12-1												
		TM 38-750												
093-424 -1057	Perform Periodic Test on Launcher Panel Meters	TM 9-243	1	Q								A		
		TM 9-1440-531-12-1												
		TM 9-4935-1548-14 TM 38-750												

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				BT	AIT	PTC	PLC	ANCOC	SNCOC	SGMA	UNIT
											SOJT
											SELF STUDY
											SCD TNG
SKILL LEVEL 1											
093-424 -1058	Perform Forward Breakaway Check Procedures	TM 9-243 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1		Q						A
093-424 -1059	Perform Quarterly Maintenance on Launcher	TM 9-243 TM 9-1440-531-12-1 TM 38-750	1		Q						A
093-424 -1060	Perform Launcher Boresight	TM 9-243 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1		Q						A
093-424 -1061	Repair Sector Release Mechanism Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-24P TM 9-1440-531-34-2 TM 38-750	1		Q						A
093-424 -1062	Repair Sector Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1		Q						A

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING														
				INSTITUTION						UNIT								
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT	SELF STUDY	SCD TNG					
SKILL LEVEL 1																		
093-424 -1063	Replace Azimuth Drive and Data Assembly Component	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 38-750	1	Q								A						
093-424 -1064	Repair Forward Support Assembly	TM 9-243 TM 9-1440-531 TM 9-1440-531-34-2 TM 38-750	1	Q								A						
093-424 -1065	Repair Launcher Control Unit (LCU)	TM 9-243 TM 9-1440-531-12-1 TM 9-1440-531-24P TM 9-1440-531-34-2 TM 38-750	1	Q								A						
093-424 -1066	Repair Azimuth Drive and Data Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1	Q								A						
093-424 -1067	Replace Actuator Control Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1	Q								A						

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING								
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT	SELF STUDY
SKILL LEVEL 1												
093-424 -1068	Repair Rear Support Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1		Q						A	
093-424 -1069	Repair Elevation Data Mechanism (EDM)	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1		Q						A	
093-424 -1070	Repair Alinement Telescope and Fire Cutout Assembly	TM 9-243 TM 9-1440-531-12-1 TM 9-1440-531-34-2 TM 38-750	1		Q						A	
PERFORMING IMPROVED HAWK (IH) LOADER TRANSPORTER SUPERSTRUCTURE MAINTENANCE												
093-424 -1075	Replace Extension Cylinder	TM 9-243 TM 9-1450-500-10 TM 9-1450-500-34 TM 38-750	1		Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION						UNIT	
				AIT	PTC	PLC	ANCOC	SNCOC	SGMA	SOJT	SELF STUDY
				BT							SCD TNG
SKILL LEVEL 1											
093-424 -1076	Load Test Loader Transporter	TM 9-243	1	Q						A	
		TM 9-1450-500-10									
		TM 9-1450-500-34									
		TM 38-750									
093-424 -1077	Replace Extension Cylinder Flow Regulator Valve	TM 9-243	1							A	Q
		TM 9-1450-500-10									
		TM 9-1450-500-34									
		TM 38-750									
093-424 -1078	Replace Latch and Release Switch	TM 9-243	1	Q						A	
		TM 9-1450-500-10									
		TM 9-1450-500-20									
		TM 38-750									
093-424 -1079	Replace Hydraulic Pump and Pump Drive	TM 9-243	1	Q						A	
		TM 9-1450-500-10									
		TM 9-1450-500-20									
		TM 9-1450-500-34									
093-424 -1080	Replace Hoisting Ream Solenoid	TM 38-750	1	Q						A	
		TM 9-243									
		TM 9-1450-500-20									
		TM 9-1450-500-34									
		TM 38-750									

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING												
				INSTITUTION						UNIT						
				BT	AIT	PTC	PLC	ANCOC	SNCO	SGMA	SOJT	SELF STUDY	SCD TNG			
SKILL LEVEL 1																
093-424 -1081	Replace Yoke Assembly	TM 9-243 TM 9-1450-500-10 TM 9-1450-500-34 TM 38-750	1		Q						A					
093-424 -1082	Replace Transfer Arm Link Assembly Limit Switch	TM 9-243 TM 9-1450-500-10 TM 9-1450-500-20 TM 38-750	1		Q						A					
093-424 -1083	Replace Transfer Arm Assembly	TM 9-243 TM 9-1450-500-10 TM 9-1450-500-20 TM 9-1450-500-34 TM 38-750	1		Q						A					
093-424 -1084	Replace Index Boom/Link Assembly Limit Switch	TM 9-243 TM 9-1450-500-10 TM 9-1450-500-20 TM 38-750	1		Q						A					
093-424 -1085	Replace Azimuth and Roll Limit Switch	TM 9-243 TM 9-1450-500-10 TM 9-1450-500-20 TM 38-750	1		Q						A					

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION							UNIT
				AIT	PTC	PLC	ANCOG	SNCOG	SGMA	SOJT	
				BT	SELF STUDY	SCD TNG					
SKILL LEVEL 1											
093-424 -1086	Replace Hoisting Beam	TM 9-243	1	Q							A
		TM 9-1450-500-10									
		TM 9-1450-500-20									
		TM 9-1450-500-34									
		TM 38-750									
093-424 -1087	Replace Link Assembly	TM 9-243	1	Q							A
		TM 9-1450-500-34									
		TM 38-750									
093-424 -1089	Replace Index Boom	TM 9-243	1	Q							A
		TM 9-1450-500-10									
		TM 9-1450-500-34									
		TM 38-750									
093-424 -1090	Perform Hoisting Beam Latch Adjustment	TM 9-243	1	Q							A
		TM 9-1450-500-10									
		TM 9-1450-500-20									
		TM 9-1450-500-34									
		TM 38-750									
093-424 -1091	Repair Hoisting Beam	TM 9-243	1	Q							A
		TM 9-1450-500-10									
		TM 9-1450-500-20									
		TM 9-1450-500-34									
		TM 38-750									

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION						UNIT	
				AIT	PTC	PLC	ANCOG	SNCOG	SGMA	SOJT	SELF STUDY
				BT							
SKILL LEVEL 1											
093-424 -1092	Repair Distribution Box	TM 9-243 TM 9-1450-500-20 TM 38-750	1	Q						A	
PERFORMING IMPROVED HAWK CONTINUOUS WAVE ACQUISITION RADAR (ICWAR) ELECTROMECHANICAL MAINTENANCE											
093-424 -1097	Perform Backlash Procedures on the Improved HAWK Continuous Wave Acquisition Radar (ICWAR)	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-1528-34-2 TM 38-750	1	Q						A	
093-424 -1098	Replace Final Drive Assembly	TM 9-243 TM 9-1430-1528-12-1 TM 9-1430-1528-34-2 TM 38-750	1	Q						A	
093-432 -1099	Repair Waveguide Rotary Coupler	TM 9-243 TM 9-1430-1528-12-1 TM 9-1430-1528-34-2 TM 38-750	1	Q						A	
093-424 -1101	Replace Gear Assembly	TM 9-243 TM 9-1430-1528-12-1 TM 9-1430-1528-34-2 TM 38-750	1	Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION							UNIT
				BT	AIT	PTC	PLC	ANCOG	SNCOG	SGMA	
				SOJT	SELF STUDY	TSCD TNG					
SKILL LEVEL 1											
093-424 -1102	Repair Azimuth Drive Assembly	TM 9-243 TM 9-1430-1528-12-1 TM 9-1430-1528-34-2 TM 38-750	1	Q						A	
093-424 -1103	Replace Torque Tube Assembly	TM 9-243 TM 9-1430-1528-12-1 TM 9-1430-1528-34-2 TM 38-750	1	Q						A	
093-424 -1104	Replace Antenna Pedestal	TM 9-243 TM 9-1430-1528-12-1 TM 9-1430-1528-34-2 TM 38-750	1	Q						A	
093-424 -1105	Repair Antenna Pedestal	TM 9-243 TM 9-1430-1528-12-1 TM 9-1430-1528-34-2 TM 38-750	1							A	Q
PERFORMING IMPROVED HAWK HIGH POWERED ILLUMINATOR RADAR (IHIPR) ELECTROMECHANICAL MAINTENANCE											
093-424 -1110	Purge Coolant System	TM 9-243 TM 9-1430-533-12-1 TM 38-750	1	Q						A	
093-424 -1111	Replace Azimuth Drive Gear	TM 9-243 TM 9-1430-533-12-1 TM 9-1430-533-34-2 TM 38-750	1	Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING								
				INSTITUTION							UNIT	
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT	SELF STUDY
SKILL LEVEL 1												
093-424 -1112	Repair Counter Balance Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-533-12-1 TM 9-1430-533-34-2 TM 38-750	1	Q							A	
093-424 -1113	Replace Counter Balance Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-533-12-1 TM 9-1430-533-34-2 TM 38-750	1	Q							A	
093-424 -1114	Replace Liquid Cooler Unit	TM 9-243 TM 9-1430-533-12-1 TM 9-1430-533-34-2 TM 38-750	1	Q							A	
093-424 -1115	Replace Elevation Stow Lock	TM 9-243 TM 9-1430-533-12-1 TM 9-1430-533-34-2 TM 38-750	1	Q							A	
093-424 -1116	Replace Elevation Motor Tachometer Generator	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-533-12-1 TM 9-1430-533-34-2 TM 38-750	1	Q							A	
093-424 -1117	Replace Elevation Synchro	TM 9-243 TM 9-1430-533-12-1 TM 9-1430-533-34-2 TM 38-750	1	Q							A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING								
				INSTITUTION						UNIT		
				BT	AIT	PTC	PLC	ANCOG	SNCOG	SGMA	SOJT	
				SELF STUDY	SCD TNG							
SKILL LEVEL 1												
093-424 -1118	Repair Rotary Pump	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-533-12-1 TM 9-1430-533-34-2 TM 38-750	1	Q							A	
093-424 -1119	Repair Azimuth Synchro Drive	TM 9-243 TM 9-1430-533-12-1 TM 9-1430-533-24P TM 9-1430-533-34-2 TM 38-750	1	Q							A	
093-424 -1120	Adjust Elevation Drive Clutch	TM 9-243 TM 9-1430-533-12-1 TM 9-1430-533-34-2 TM 38-750	1	Q							A	
093-424 -1121	Repair Azimuth Drive Box and Housing Assembly	TM 9-243 TM 9-1430-533-12-1 TM 9-1430-533-24P TM 9-1430-533-34-2 TM 38-750	1	Q							A	
093-424 -1122	Perform Boresight Procedures (IHPIR)	TM 9-243 TM 9-1430-533-12-1 TM 9-1430-533-24P TM 9-1430-533-34-2 TM 38-750	1	Q							A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION							UNIT
				BT	AIT	PTC	PLC	ANCOG	SNCOG	SGMA	SOJT
SKILL LEVEL 1											
PERFORMING IMPROVED HAWK PULSE ACQUISITION RADAR (IPAR) ELECTROMECHANICAL MAINTENANCE											
093-424 -1130	Repair Liquid Cooler	TM 9-243 TM 9-1430-1534-12-1 TM 9-1430-1534-24P TM 38-750	1	Q						A	
093-424 -1131	Replace Stabilizing System	TM 9-243 TM 9-1430-1534-12-1 TM 9-1430-1534-34-2 TM 38-750	1	Q						A	
093-424 -1132	Repair Stabilizing System	TM 9-243 TM 9-1430-1534-12-1 TM 9-1430-1534-34-2 TM 38-750	1	Q						A	
093-424 -1133	Repair Liquid Cooler Pump	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-1534-12-1 TM 9-1430-1534-34-2 TM 38-750	1	Q						A	
093-424 -1134	Repair Pressurization Unit	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-1534- -34-1 (U) TM 38-750	1	Q						A	
093-424 -1135	Repair Gear Case Assembly	TM 9-243 TM 9-1430-1534-12-1 TM 9-1430-1534-34-2 TM 38-750	1	Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION						UNIT	
				BT	AIT	PTC	PLC	ANCO	SNCO	SGMA	SOJT
SKILL LEVEL 1											
093-424 -1136	Repair Turntable	TM 9-243 TM 9-1430-1534-12-1 TM 9-1430-1534-34-2 TM 38-750	1	Q						A	
093-424 -1137	Replace QK-629 Stabilization Cavity Drive Belt	TM 9-243 TM 9-1430-1534-12-1 TM 9-1430-1534-34-2 TM 38-750	1	Q						A	
093-424 -1138	Repair Shouldered Shaft Assembly	TM 9-243 TM 9-1430-1534-12-1 TM 9-1430-1534-34-2 TM 38-750	1	Q						A	
PERFORMING IMPROVED HAWK RANGE ONLY RADAR (IROR) ELECTROMECHANICAL MAINTENANCE											
093-424 -1140	Replace Final Drive Assembly	TM 9-243 TM 9-1430-529-34-2 TM 38-750	1	Q						A	
093-424 -1141	Perform Sector and Spur Gear Backlash Check	TM 9-243 TM 9-1430-529-34-2 TM 38-750	1	Q						A	
093-424 -1142	Perform Elevation Backlash Check Procedures	TM 9-243 TM 9-1430-529-34-2 TM 38-750	1	Q						A	
093-424 -1143	Replace Azimuth Data Assembly	TM 9-243 TM 9-1430-529-34-2 TM 38-750	1	Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING								
				INSTITUTION						UNIT		
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT	SELF STUDY
SKILL LEVEL 1												
093-424 -1144	Replace Cable and Ring Assembly	TM 9-243 TM 9-1430-529-34-2 TM 38-750	1		Q						A	
093-424 -1145	Replace Rotating Head Synchros	TM 9-243 TM 9-1430-529-34-2 TM 38-750	1								Q	A
093-424 -1146	Perform Boresight Procedures (IROR)	TM 9-243 TM 9-1430-529-12-1 TM 9-1430-529-34-2 TM 38-750	1		Q						A	
093-424 -1147	Repair Rotating Head Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-529-34-2 TM 38-750	1		Q						A	
093-424 -1148	Repair Head and Tube Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-529-12-1 TM 9-1430-529-34-2 TM 38-750	1		Q						A	
093-424 -1149	Repair Upper Head Contact Ring and Holder Assembly	TM 9-243 TM 9-1425-525-12-4 TM 9-1430-529-12-1 TM 9-1430-529-34-2 TM 38-750	1		Q						A	
093-424 -1150	Perform Replacement and Alinement of Rotating Head Synchro	TM 9-243 TM 9-1430-529-12-1 TM 9-1430-529-34-2 TM 38-750	1		Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING													
				INSTITUTION						UNIT							
				BT	AIT	PTC	PLC	ANCOG	SNCOG	SGMA							
SKILL LEVEL 1																	
PERFORMING IMPROVED HAWK (IH) LAUNCHER TEST SET AND SYNCHRO TEST SET MAINTENANCE																	
093-424 -1151	Repair Launcher Test Set	TM 9-243 TM 9-1425-525-12-4 TM 9-4935-542-34 TM 38-750	1	Q											A		
093-424 -1152	Repair Synchro Test Set TF8-106 or TF8-106A	TM 9-243 TM 9-1425-525-12-4 TM 9-4935-1540-14-1 TM 38-750	1	Q											A		
PERFORMING IMPROVED HAWK (IH) SUPPORT MAINTENANCE TEST EQUIPMENT (SMTE) SHOP 8 MAINTENANCE																	
093-424 -1153	Perform Periodic Maintenance on Torque Wrenches	TM 9-243 TM 9-1425-525-12-4 TM 9-4935-1541-14 TM 38-750	1	Q											A		
093-424 -1154	Perform Preventive Maintenance (PM) on Tools and General Application Equipment	TM 9-243 TM 9-4935-1541-14	1	Q											A		
REPAIRING CHASSIS OF IMPROVED HAWK (IH) LAUNCHER AT THE HIGH FREQUENCY CONSOLE																	
093-424 -1160	Repair Alinement Telescope and Fire Cutout Assembly	TM 9-243 TM 9-1440-531-34-1 TM 38-750	1												Q	A	
093-424 -1161	Repair Elevation Control Amplifier	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-1 TM 38-750	1	Q											A		

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION							UNIT
				AIT	PTC	PLC	ANCOC	SNCOC	SGMA	SOJT	
				BT	SELF STUDY	SCD TNG					
SKILL LEVEL 1											
093-424 -1162	Repair Elevation Servo Geartrain	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-1 TM 38-750	1	Q						A	
093-424 -1163	Repair Azimuth or Elevation Servo Amplifier	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-1 TM 38-750	1	Q						A	
093-424 -1164	Repair Control Amplifier Power Supply	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-1 TM 38-750	1	Q						A	
093-424 -1165	Repair Launcher Programmer	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-1 TM 38-750	1	Q						A	
093-424 -1166	Repair Logic Chassis	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-1 TM 38-750	1	Q						A	
093-424 -1167	Repair Azimuth Servo Geartrain	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-1 TM 38-750	1	Q						A	
093-424 -1168	Repair 28-Volt DC Power Supply	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-1 TM 38-750	1	Q						A	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING									
				INSTITUTION						UNIT			
SKILL LEVEL 1													
PERFORMING INTRASYSTEM MAINTENANCE													
093-424 -1173	Repair Improved Launcher Integrated System Malfunction	TM 9-243 TM 9-1400-500-12/4 TM 9-1425-525-12-4 TM 9-1430-533-12-1 TM 9-1430-533 -12-2-1 (U) TM 9-1430-533 -12-2-2 (U) TM 9-1440-531-12-1 TM 9-1440-531-12-2 TM 9-1440-531-12-3 TM 38-750	1	BT	AIT	PTC	PLC	ANCOC	SNCOC	SGMA	SOJT	SELF STUDY	SCD TNG
					Q						A		
093-424 -1174	Perform Improved HAWK System Alignment Procedures	TM 9-243 TM 9-1425-525-12-1 TM 9-1440-531-12-1 TM 38-750	1	BT	Q						A		

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING							
				INSTITUTION							UNIT
				BT	AIT	PTC	PLC	ANCOC	SNCOC	SGMA	SOJT
				SELF STUDY	SCD TNG						
SKILL LEVEL 2											
DA FORMS AND RECORDS											
093-420 -2102	Prepare DA Form 2028 (Recommended Changes to Publications and Blank Forms)	AR 310-1 AR 310-3	2							Q	
093-420 -2106	Prepare DA Form 2062 (as a Sub-Hand Receipt)	AR 710-2	2							Q	
QUALITY ASSURANCE/QUALITY CONTROL											
093-420 -2152	Perform In Process Inspection	TM 38-750 TM 750-245-4	2							A	Q

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING										
				INSTITUTION							UNIT			
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT	SELF STUDY	SCD TNG	
SKILL LEVEL 2														
093-420 -2153	Perform Initial Inspection	FM 9-59 TM 38-750 TM 750-245-4 ACCP Subcourses: MM 0102 MM 0720	2								A	Q		
093-420 -2154	Perform Final Inspection	DA Pam 750-10 TM 38-750 TM 750-245-4 ACCP Subcourses: MM 0102 MM 0720	2								A	Q		
093-420 -2155	Perform Technical Inspection	FM 9-59 TM 38-750 ACCP Subcourses: MM 0102 MM 0720	2								A	Q		

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TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING														
				INSTITUTION						UNIT								
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT							
				SCD TNG	SELF STUDY													
SKILL LEVEL 2																		
REPAIRING CHASSIS OF THE IMPROVED HAWK (IH) LAUNCHER AT THE HIGH FREQUENCY CONSOLE																		
093-424 -2037	Repair Azimuth Control Amplifier	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-34-1 TM 38-750	2															
093-424 -2038	Repair Launcher Section Control Box	TM 9-243 TM 9-1425-525-12-4 TM 9-1440-531-12-1 TM 9-1440-531-12-3 TM 38-750																
TRANSPORTING MAJOR END ITEMS OF THE IMPROVED HAWK (IH) MISSILE SYSTEM																		
093-424 -2042	Transport Support Maintenance Test Equipment (SMTE) Shop 8 by Prime Mover	TM 9-243 TM 9-4935-1541-14	2															
093-424 -2043	Prepare Support Maintenance Test Equipment (SMTE) Shop 8 For Transport by Helicopter	TM 9-243 TM 9-4935-1541-14	2															
093-424 -2044	Transport Guided Missile Launcher by Prime Mover	TM 9-243 TM 9-1425-525-12-1	2															

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING									
				INSTITUTION						UNIT			
SKILL LEVEL 2													
093-424 -2045	Transport Float Loader Transporter by Prime Mover	TM 9-243 TM 9-1450-500-10	2								SOJT	SELF STUDY	TSCD
093-424 -2046	Transport Missile Pallet by Prime Mover	TM 9-243 TM 9-1425-525-12-1 TM 9-1440-531-12-1	2										
093-424 -2048	Prepare Guided Missile Launcher For Transport by Helicopter	TM 9-243 TM 9-1425-525-12-1 TM 9-1440-531-12-1	2										
093-424 -2049	Prepare Loader Transporter for Transport by Helicopter	TM 9-243 TM 9-1450-500-10	2										
093-424 -2050	Transport Improved HAWK Launcher Section Control Box (ILSCB) by a Prime Mover	TM 9-243 TM 9-1425-525-12-1	2										

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING									
				INSTITUTION							UNIT		
				BT	AIT	PTC	PLC	ANCOG	SNCOC	SGMA	SOJT	SELF STUDY	SCD TNG
SKILL LEVEL 3													
SUPERVISION AND MAINTENANCE MANAGEMENT													
093-420 -3101	Direct Performance of Support Maintenance	FM 9-59 TM 38-750 TM 750-245-4	3					Q			A		
093-420 -3102	Direct Performance of Preventive Maintenance	FM 9-59 TM 38-750	3					Q			A		
093-420 -3103	Monitor Status of Assigned Workload	FM 9-59 FM 29-23 TM 38-750	3								A	Q	
093-420 -3104	Inspect Shop/Work Area	FM 9-59	3								A	Q	
093-420 -3105	Provide Technical Assistance to Supported Units	AR 750-1 FM 29-23 ACCP Subcourses: MM 0102 MM 0720	3								A	Q	
093-420 -3107	Monitor Shop Safety	AR 385-10 FM 9-59	3								A	Q	
093-420 -3108	Monitor Shop Security	FM 9-59	3								A	Q	
093-420 -3109	Brief Newly Assigned Personnel on Maintenance Activities	FM 9-59	3								A	Q	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING									
				INSTITUTION						UNIT			
SKILL LEVEL 3				BT	AIT	PTC	PLC	ANCO	SNCO	SGMA	SOJT	SELF STUDY	SCD TNG
093-420 -3110	Coordinate Activities Between Repair Sections and Technical Supply	AR 710-2 FM 9-59 FM 29-25	3								A	Q	
093-420 -3112	Coordinate Maintenance Team Operations	FM 9-59 ACCP Subcourses: MM 0102 MM 0720	3								A	Q	
093-420 -3115	Insure Maintenance on Operational Readiness Float Equipment is Performed	FM 9-59 FM 29-25 TM 38-750 TB 43-180	3								A	Q	
093-420 -3117	Maintain Shop Publications	AR 340-18-1 DA Pam 310-4 DA Pam 750-10 DA Pam 310-10 DA Pam 310-13	3								A	Q	
093-420 -3145	Prepare SF 368 (Quality Deficiency Report)	TM 38-750	3								A	Q	

TASK NUMBER	TITLE	PRIMARY TRAINING MATERIALS	INITIAL TRAINING LEVEL	RESPONSIBILITY FOR TRAINING									
				INSTITUTION				UNIT					
				BT	AIT	PTC	PLC	ANCOG	SNCOG	SGMA	SOJT	SELF STUDY	SCD TNG
SKILL LEVEL 3													
093-420 -3157	Inspect Shop Stock Operation	AR 710-2 FM 9-59 FM 29-25 TM 38-750 TEC Lesson 121-093-6999-A	3								Q		
093-434 -2552	Implement Calibration Support Program	AR 750-25-1 TM 38-750 TB 43-180-1 TB 750-25-1	3								Q		

APPENDIX A

CONSOLIDATED LIST OF REFERENCES

All references containing information on subjects listed in this Soldier's Manual may not be listed here. New material is constantly being published and present references may become obsolete. See DA Pam 310 series and instructional material catalogs to keep up to date.

ARMY REGULATIONS (AR)

310-1	Publications, Blank Forms and Printing Management
310-2	Identification and Distribution of DA Publications and Issue of Agency Command Administrative Publications
310-3	Preparation, Coordination, and Approval of Department of the Army Publications
340-18-1	The Army Functional File System: General Provisions
385-10	Army Safety Program
600-200	Enlisted Personnel Management System
601-280	Army Reenlistment Program
623-205	Enlisted Evaluation Reporting System
672-5-1	Military Awards
710-2	Materiel Management for Using Units, Support Units and Installations
750-1	Army Materiel Maintenance Concepts and Policies
750-25-1	Army Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Repair Support Program

DA PAMPHLETS (DA PAM)

310-4	Index to Technical Manuals, Technical Bulletins, Supply Manuals (Types 7, 8, and 9), Supply Bulletins and Lubrication Orders (Available in Microfiche Only)
310-10	Guide for Publications Supply Personnel
310-13	Posting and Filing Publications
750-1	Maintenance Guide for Leaders
750-10	Military Publications: US Army Equipment Index of modification Work Orders

FIELD MANUALS (FM)

5-20	Camouflage
9-59	Unit Operations for Support of Missile and Air Defense Guns Systems
21-11	First Aid for Soldiers

21-26	Map Reading
21-26-1	Map Reading
21-40	NBC (Nuclear, Biological and Chemical) Defense
21-48	Planning and Conducting Chemical, Biological, Radiological (CBR), and Nuclear Defense Training
21-305	Manual for the Wheeled Vehicle Driver
22-5	Drill and Ceremonies
22-100	Military Leadership
22-101	Leadership Counseling
23-12	Technique of Fire of the Rifle Squad and Tactical Application
23-30	Grenades and Pyrotechnic Signals
29-23	Direct Support Maintenance Operations (Nondivisional)
29-25	Direct Exchange, Shop Supply and Operational Float Procedures
55-30	Army Motor Transport Units and Operations
55-65	Preparation for Unit Movement Overseas by Surface Transportation

TECHNICAL MANUALS (TM)

3-220	Chemical, Biological, and Radiological (CBR) Decontamination
9-243	Use and Care of Handtools and Measuring Tools
9-1330-200-12	Operator's and Organizational Maintenance Manual for Grenades (TM 1330-12/1A)
9-1400-500-12/4	Operator and Organizational Maintenance Manual System Functional Interconnection Diagrams (HAWK Air Defense Guided Missile System)
9-1425-525-12-1	Operator and Organizational Maintenance Manual Emplacement of Improved HAWK Air Defense Guided Missile System (Improved HAWK Air Defense Guided Missile System)
9-1425-525-12-4	Operator's and Organizational General Maintenance for the Improved HAWK Guided Missile System
9-1430-529-12-1	Operator's and Organizational Maintenance Manual: Radar Set AN/MPQ-51 (X0-1), 10399038 W/E: 10674604 WO/E (NSN 1430-00-178-8454) (Improved HAWK Air Defense Guided Missile System)
9-1430-529-34-2	Direct Support and General Support Maintenance Manual: Radar Set AN/MPQ-51 (X0-1) (Improved HAWK Air Defense Guided Missile System)
9-1430-533-12-1	Operator's and Organizational Maintenance Manual for Improved High-Powered Illuminator Radar Set AN/MPQ-46 (X0-1) (Improved HAWK Air Defense Guided Missile System)
9-1430-533-12-2-1	Operator and Organizational Maintenance Manual: Functional Theory and Schematics for Radar Set, AN/MPQ-46 (X0-1) (Improved HAWK Air Defense Guided Missile System) (U)

- 9-1430-533-12-2-2 Operator's and Organizational Maintenance Manual: Functional Theory and Schematics for Radar Set, AN/MPQ-46 (X0-1) (Improved HAWK Air Defense Guided Missile System) (U)
- 9-1430-533-24P Organizational, Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Radar Set, AN/MPQ-46 (X0-1) Improved High Powered Illuminator (NSN 1430-00-782-9816) (Improved HAWK Air Defense Guided Missile System)
- 9-1430-533-34-2 Direct Support and General Support Maintenance Manual: Radar Set, AN/MPQ-46 (X0-1) (Improved HAWK Air Defense Guided Missile System)
- 9-1430-1528-12-1 Operator's and Organizational Maintenance Manual for Radar Set AN/MPQ-55 (X0-1) 11510700 (NSN 1430-01-042-4907) (Improved HAWK Air Defense Guided Missile System)
- 9-1430-1528-34-2 Direct Support and General Support Maintenance Manual for Radar Set, AN/MPQ-55 (X0-1) (Improved HAWK Air Defense Guided Missile System)
- 9-1430-1534-12-1 Operator's and Organizational Maintenance Manual for Radar Set, AN/MPQ-50 (X0-2) 11510155 (NSN 1430-01-042-4908) (Improved HAWK Air Defense Guided Missile System)
- 9-1430-1534-24P Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Radar Set, AN/MPQ-50 (X0-2) (Pulse Acquisition, Trailer Mounted) (NSN 1430-01-042-4908) (Improved HAWK Air Defense Guided Missile System)
- 9-1430-1534-34-1 Direct Support and General Support Maintenance Manual for Units of Radar Set AN/MPQ-50 (X0-2) Tested at the High Frequency Console (Improved HAWK Air Defense Guided Missile System) (U)
- 9-1430-1534-34-2 Direct Support and General Maintenance Manual for Radar Set AN/MPQ-50 (X0-2) 11510155 (NSN 1430-01-042-4908) (Improved HAWK Air Defense Guided Missile System)
- 9-1440-531-12-1 Operator and Organizational Maintenance Manual: Improved Guided Missile Zero Length Launcher, M192E1: Guided Missile Loading and Storage Pallet, M1E2 and Improved Guided Missile Launching Section Control Box, AN/GSA-132A (X0-1) (Improved HAWK Air Defense Guided Missile System)
- 9-1440-531-12-2 Operator's and Organizational Maintenance Manual: Functional Theory and Schematics for Improved Guided Missile Zero-Length Launcher, M192E1, and Improved Guided Missile Launching Section Control Box, AN/GSA-132 (X0-1) (Improved HAWK Air Defense Guided Missile System)
- 9-1440-531-12-3 Operator and Organizational Maintenance Manual: Schematics for Improved Guided Missile Zero Length Launcher, M192E1, and Improved Guided Missile Launching Section Control Box, AN/GSA-132 (X0-1) (Improved HAWK Air Defense Guided Missile System)
- 9-1440-531-24P Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Launcher, Zero Length, Guided Missile, M192E1

(NSN 1440-00-805-3012); Control Box, Launching Section, Guided Missile (AN/GSA-132) (1440-00-178-8455); (AN/GSA-132A) (1440-00-602-5055); Pallet, Loading and Storage, Guided Missile, M1E2 (1450-00-103-5399) and Puller Kit (1450-00-700-8516) (Improved HAWK Air Defense Guided Missile System)

- 9-1440-531-34-1 Direct Support and General Support Maintenance Manual: Units of Guided Missile Zero Length Launcher M192E1 Tested at the High Frequency Console (Improved HAWK Air Defense Guided Missile System)
- 9-1440-531-34-2 Direct Support and General Support Maintenance Manual: Improved Guided Missile Launcher, M192E1, Guided Missile Loading and Storage Pallet, M1E2, and Improved Guided Missile Launching Section Control Box, AN/GSA-132 (X0-1) (Improved HAWK Air Defense Guided Missile System)
- 9-1450-500-10 Operator's Manual for Loader-Transporter, Guided Missile, XM501E3 (HAWK Guided Missile System) (NSN 1450-00-066-8873)
- 9-1450-500-20 Organizational Maintenance Manual Loader-Transporter, Guided Missile XM501E3, Part No, 11675300 (NSN 1450-00-066-8873) (HAWK Guided Missile System)
- 9-1450-500-34 Direct Support and General Support Maintenance Manual for Loader-Transporter, Guided Missile XM 501E3, Pt. No. 11675300 (NSN 1450-00-066-8873) (HAWK Guided Missile System)
- 9-4935-262-14 Operator, Organizational, Direct Support and General Support Maintenance Manual: Electrical Cable Test Set, AN/GSM-45
- 9-4935-501-14 Operator, Organizational, DS and GS, Maintenance Manual Operation and Maintenance Instructions for Electronic Voltmeter, FSN 6625-967-1504 (HAWK Air Defense Guided Missile System)
- 9-4935-542-12 Operator and Organizational Maintenance Manual: Organizational Maintenance for Guided Missile Remote Control System Shop Equipment AN/TSM-112: Guided Missile Test Equipment, OME-GSE and Shop Equipment, GSM-XM1, Improved Platoon Support Van (IPSV) (Improved HAWK Air Defense Guided Missile System)
- 9-4935-542-34 Direct Support and General Support Maintenance Manual: Units of Guided Missile Remote Control System Shop Equipment AN/TSM-112 Tested at the High-Frequency Console (Improved HAWK Air Defense Guided Missile System)
- 9-4935-1540-14-1 Operator, Organizational, Direct Support and General Support Maintenance Manual: Guided Missile Remote Control System Shop Equipment AN/TSM-104 (X0-1), AN/TSM-105 (X0-1), AN/TSM-106 (X0-1), AN/TSM-108 (X0-1) and AN/TSM-121 (X0-1) and Supplementary Equipment, Guided Missile Test Station AN/TSM-120 (X0-1) (Improved HAWK Air Defense Guided Missile System)
- 9-4935-1541-14 Operator's Organizational, Direct Support and General Support Maintenance Manual: Guided Missile System Shop Equipment, AN/TSM-132 and AN/TSM-107 (X0-1) (Improved HAWK Air Defense Guided Missile System)

9-4935-1548-14	Operator, Organizational, Direct Support and General Support Maintenance Manual: Periodic Tests Using Calibrator and Microwave Calibrator (Improved HAWK Air Defense Guided Missile System)
10-277	Chemical, Toxicological and Missile Fuel Handlers Protective Clothing
11-2050	Test Set I-48-B and Ohmmeter ZM-21A/U
11-5511	Electronic Multimeter TS-505/U
11-5805-201-12	Operator and Organizational Maintenance Manual: Telephone Set, TA-312/PT (NSN 5805-00-543-0012) (TO 31W1-2PT-291)
11-6625-239-12	Operator's and Organizational Maintenance Manual: Electronic Multimeters, TS-505A/U and TS-505B/U and Multimeters, TS-505C/U and TS-505D/U
11-6625-274-12	Operator's and Organizational Maintenance Manual: Test Sets, Electron Tube TV-7/U, TV-7A/U, TV-7B/U, and TV-7D/U
11-6625-475-10	Operator's Manual: Multimeters AN/PSM-6, AN/PSM-6A, and AN/PSM-6B
11-6625-2658-14	Operator's Organizational, Direct Support and General Support Maintenance Manual for Oscilloscope, AN/USM-281C (NSN 6625-00-106-9622)
38-750	The Army Maintenance Management System (TAMMS)
55-603	Movement of Military Impedimenta by Commercial Carriers
750-245-4	Direct Support and General Support Quality Control Inspector's Inspection Criteria

TECHNICAL BULLETINS (TB)

43-180	Calibration Requirements for the Maintenance of Army Materiel
43-180-1	Calibration and Repair Requirements for the Maintenance of Army Materiel
750-25-1	Maintenance of Supplies & Equipment: Army Test, Measurement & Diagnostic Equipment (TMDE) Calibration and Repair Support Program

TEC LESSONS

102-906-1011-A	AN/USM-281C Oscilloscope Operation
102-906-1012-A	AN/USM-281C Oscilloscope X-Y Operation
102-906-1081-A	TV-7/U Tube Tester Operation, Part 1
121-093-6913-A	Identify Controls of the AN/GSM-45 Cable Tester
121-093-6914-A	Prepare the AN/GSM-45 for Test
121-093-6915-A	Operate the AN/GSM-45
121-093-6999-A	In's and Out's of Shop Supply
231-906-1013-A	AN/USM-281C Oscilloscope Z-Axis Operation
231-906-1014-A	AN/USM-281C Oscilloscope S.A.D.I. Operation

FM 9-24L/TG

500-121-8125-F	Introduction to Posting DA Publications
500-121-8126-F	Posting DA Publications
911-441-0024-F	Basic First Aid Measures: The Lifesaving Steps
911-441-0026-F	Basic First Aid Measures: Restoring the Breathing
911-441-0029-F	Stopping the Bleeding, Part 2, and Controlling the Shock
930-071-0014-F	Measuring Distance and Azimuth
930-071-0016-F	Terrain Features
930-071-0018-F	Navigating with Map and Compass
942-071-0002-F	Hand Grenade Maintenance and Identification

ARMY CORRESPONDENCE COURSE PROGRAM (ACCP)

MM 0102	Missile Maintenance Shop Operations
MM 0494	Calibration Coordinator
MM 0720	Quality Assurance, Quality Control (Missile Maintenance)
MM 0928	Improved HAWK System Test Equipment

ADDITIONAL REFERENCES

ACP 134 (A)	Telephone Switchboard Operating Procedures
MCM	Manual for Courts-Martial, United States, 1969, (Revised Edition)
GTA 5-2-10	Map Reading Coordinates Scales and Protractor

APPENDIX B

JOB DESCRIPTION

IMPROVED HAWK LAUNCHER AND MECHANICAL SYSTEMS REPAIRER (IH Lchr/Mech Sys Rep)

MOS 24L

Summary

Supervises or performs direct support and general support level maintenance on the electrical, hydraulic, hydropneumatic, mechanical, and electromechanical portions of the Improved HAWK system and the electronic systems of IH Launcher.

Duties

MOSC 24L10: Performs support level maintenance on the electronic systems of the IH Launcher and the electrical, hydraulic, hydropneumatic, mechanical, and electro-mechanical portions of the IH System Launcher, Improved Battery Control Central (IBCC), Improved High Powered Illuminator Radar (IHIPIR), Improved Pulse Acquisition Radar (IPAR), Improved Continuous Wave Acquisition Radar (ICWAR), Range-Only Radar (ROR), Information Coordination Central (ICC), Improved Platoon Command post (IPCP), Simulator Station, Launching Section Control Box, system associated test equipment, Loader-Transporter Superstructure, and Support Maintenance Test Equipment (SMTE) Shops 1, 2, 3, 5, 6, 8 and 9, and Mobile Team Shop (MTS). **EQUIPMENT MAINTENANCE.** Tests and adjusts components to specific tolerances and determines shortcomings and deficiencies in electronic, electrical, hydraulic, hydropneumatic, mechanical, and electromechanical assemblies, subassemblies, and circuits with common and system special-design test equipment. Operates and performs organizational maintenance on SMTE Shop 3 and MTS. Operates and performs organizational and support maintenance, as authorized, on electrical and electronic portions of system associated portable test equipment employed in the maintenance of the Improved HAWK Launcher and the electrical, hydraulic, hydropneumatic, mechanical, and electromechanical portions of the IH system. Operates and maintains SMTE Shops 5, 6 and 8. Repairs unserviceable items by removing and replacing defective components and parts. Determines serviceability and disposition of defective assemblies, subassemblies, and parts. Performs load testing, maintenance calibrations, and repair of job-related tools and equipment. Serves on maintenance teams. **INSPECTION.** Performs quality control measures. Serves on inspection teams.

MOSC 24L20: Performs duties shown in preceding level of skill and provides technical guidance to lower grade personnel. **INSPECTION.** Performs initial and final type checkout and inspection of designated system items and their assemblies and subassemblies. **EQUIPMENT MAINTENANCE.** Installs equipment modifications. Provides technical assistance to supported units. Completes maintenance and supply forms.

MOSC 24L30: Supervises duties performed at preceding levels of skill. **SUPERVISION.** Establishes workloads and repair priorities. Recommends procedures for receipt, storage, inspection, testing, and repair of items. Implements quality control measures. Supervises inspection and maintenance teams. Organizes and conducts on-the-job training programs. Determines faulty work practices and demonstrates proper maintenance and troubleshooting techniques. Establishes and keeps maintenance records. Prepares maintenance reports.

QUESTIONNAIRE FM 9-24L/TG

As the user of this manual, you are a vital member of our writing team. Please provide us your opinion and suggestions by filling out this questionnaire. Be sure to include your name, AUTOVON number, and unit so we can follow up on your suggestions.

UNIT ADDRESS _____ AUTOVON _____
 _____ NAME _____
 DUTY POSITION _____ RANK _____
 TIME IN GRADE _____ TIME IN SERVICE _____

1. Did the Introduction explain to you the purpose of the manual? ☐ Yes ☐ No

2. Did the organization of the tasks help you plan your training? ☐ Yes ☐ No

3. Are there any tasks that should be added? ☐ Yes ☐ No

4. Are there any tasks that should be deleted? ☐ Yes ☐ No

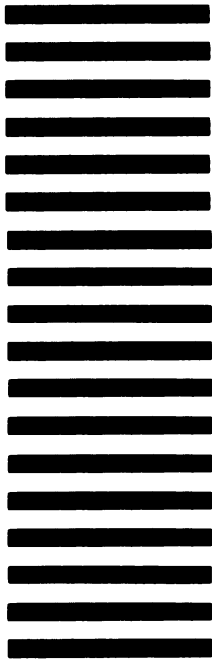
5. Did you disagree with the skill level assigned to any task? ☐ Yes ☐ No

6. Were there any problems in relating the Trainer's Guide to the Soldier's Manual? ☐ Yes ☐ No

7. Did you disagree with the training site selected for any task? ☐ Yes ☐ No

8. Did you find any errors? If so, please list. ☐ Yes ☐ No

9. Did you have any trouble understanding this manual? ☐ Yes ☐ No
 If your answer is Yes, which part(s) was unclear?



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30 NOVEMBER 1981

By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Brigadier General, United States Army
The Adjutant General

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